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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/766,448  | 01/27/2004  | Udi Suissa           | TI-34792            | 3215             |
| 23494 7590 04/15/2009<br>TEXAS INSTRUMENTS INCORPORATED<br>P O BOX 655474, M/S 3999<br>DALLAS, TX 75265 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| FOTAKIS, ARISTOCRATIS   |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 2611  |             |                      |                     |                  |
| NOTIFICATION DATE   |             | DELIVERY MODE        |                     |                  |
| 04/15/2009  |             | ELECTRONIC           |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@ti.com

### Office Action Summary

**Application No.**

10/766,448

**Applicant(s)**

SUISSA ET AL.

**Examiner**

ARISTOCRATIS FOTAKIS

**Art Unit**

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03/19/2009.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2 - 8 and 10 - 20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 10 - 20 is/are allowed.  
6) ☒ Claim(s) 2 - 8 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/CDC)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 2 – 8 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent<sup>1</sup> and recent Federal Circuit decisions<sup>2</sup> indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. The claims are not compliant to none of the two above requirements.

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<sup>1</sup> *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

<sup>2</sup> *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

***Claim Objections***

Claims 2, 5, 10, 13 and 17 are objected to because of the following informalities:

In claim 2, the limitation "**current** maximum peak value" in line 15 of Page 2 should be changed to -- previous maximum peak value"--. Appropriate correction is required.

In claim 2, the limitation "**current** maximum peak value" in line 2 of Page 3 should be changed to -- previous maximum peak value"--. Appropriate correction is required.

In claim 5, the limitation "**current** minimum peak value" in line 2 of Page 4 should be changed to -- previous minimum peak value"--. Appropriate correction is required.

In claim 5, the limitation "**current** minimum peak value" in line 7 of Page 4 should be changed to -- previous minimum peak value"--. Appropriate correction is required.

In claim 10, the limitation "**current** maximum peak value" in line 13 of Page 5 should be changed to -- previous maximum peak value"--. Appropriate correction is required.

In claim 10, the limitation "**current** maximum peak value" in lines 17 -18 of Page 5 should be changed to -- previous maximum peak value"--. Appropriate correction is required.

In claim 13, the limitation "**current** minimum peak value" in lines 15 -16 of Page 6 should be changed to -- previous minimum peak value"--. Appropriate correction is required.

In claim 13, the limitation "**current** minimum peak value" in line 20 of Page 6 should be changed to -- previous minimum peak value"--. Appropriate correction is required.

In claim 17, the limitation "**current** maximum peak value" in line 9 of Page 7 should be changed to -- previous maximum peak value"--. Appropriate correction is required.

In claim 17, the limitation "**current** maximum peak value" in lines 13 -14 of Page 7 should be changed to -- previous maximum peak value"--. Appropriate correction is required.

In claim 17, the limitation "**current** minimum peak value" in lines 7 -8 of Page 8 should be changed to -- previous minimum peak value"--. Appropriate correction is required.

In claim 17, the limitation "**current** minimum peak value" in line 12 of Page 8 should be changed to -- previous minimum peak value"--. Appropriate correction is required.

#### ***Allowable Subject Matter***

Claims 10 – 20 are allowed.

#### ***Response to Arguments***

Applicant's arguments filed March 19, 2009 have been fully considered but they are not persuasive.

Applicants submit that claims 2 and 5 are compliant with 35 USC 101, wherein the process (2) transform underlying subject matter (such as an article or materials) to a different state or thing. The Applicants submit that the limitation "an input signal wherein frequency offsets have been translated to DC offsets" represents an actual physical signal and is known to those of ordinary skill in the art. Applicants further submit that the limitations "calculating an average of said current maximum peak value and said current

minimum peak value to yield a DC offset estimate" and "subtracting said DC offset estimate from said input signal to yield a frequency compensated output signal", represents a transformation of the "input signal" into "a frequency compensated output signal" - which is a transformation of signal to a different state or thing, which complies with the requirements of 35 U.S.C. 101.

Examiner submits that the transformation of signal to a different state or thing is not the same as transforming a physical article or material to a different state. The signal itself does not have a physical embodiment but it is information data acted on. Therefore, the claims do not meet the requirements of 35 USC 101 where the alteration of a signal does not comprise the physical transformation

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARISTOCRATIS FOTAKIS whose telephone number is (571)270-1206. The examiner can normally be reached on Monday - Thursday 6:30 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aristocratis Fotakis/

Examiner, Art Unit 2611  
/Chieh M Fan/

Supervisory Patent Examiner, Art Unit 2611